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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,135	03/12/2004	Hidenori Usuda	9319G-000738	6913

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EXAMINER

FEGGINS, KRISTAL J

ART UNIT	PAPER NUMBER
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2861

DATE MAILED: 07/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/800,135	Applicant(s) USUDA, HIDENORI	
	Examiner K. Feggins	Art Unit 2861	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-10 and 13-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 13-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/21/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed 3/21/2006 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because information regarding the author, title, date and pertinent pages have been excluded. It has been placed in the application file, but the information referred to therein has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609.05(a).

Claim Objections

2. Claims 13-15 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

With regards to claims 13-15, claims do not contain any new limitations not presented in claim 1, 5 & 9 respectively.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 13-15 provides for a method for manufacturing a device but, since the claims do not set forth any steps involved in the method/process, it is unclear what method /process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claims 13-15 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. V. Brenner*, 255 F. Supp. 131 149 USPQ 475 (D.D.C. 1966).

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-3 & 8-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Imanaka et al. (US 6,116,714).

Imanaka et al. disclose the following claimed limitations:

- * regarding claims 1 & 8, a liquid drop ejecting device (Abstract, fig 15)

- * a liquid drop ejecting head device/12/ having a liquid drop ejecting head a liquid drop and a storage section storing at least one of record datum indicating whether or not the liquid drop is ejected form the liquid drop ejecting head device (col 13, lines 12-30, col 14, lines 51-67, col 14, lines 1-36, figs 15 & 17);

- * a controlling device/170/ transmitting the record datum and a driving waveform/pulse width/ driving the liquid drop ejecting head to the liquid drop ejecting head device (col 14, lines 4-16, 60-67, col 15, lines 1-5, figs 1, 17, 19, 21).

- * regarding claim 2, wherein the liquid drop ejecting head device controls the liquid drop ejecting head according to the driving waveform/pulse width/ which is transmitted from the controlling device and the record datum which is stored in the storage section (col 14, lines 4-16, 60-67, col 15, lines 1-5, figs 1, 19, 21).

- * regarding claim 3, wherein the controlling device transmits a part of the record datum or an entire record datum to the liquid drop ejecting head device before the liquid drop ejecting head device ejects the liquid drop such that the record datum be stored in the storage section (col 14, lines 4-16, 60-67, col 15, lines 1-5, figs 1, 17, 19, 21).

* further regarding claim 8, a storage section storing at least one of record datum indicating whether or not the liquid drop is ejected from the liquid drop ejecting head (col 14, lines 4-16, 60-67, col 15, lines 1-5, figs 1, 17, 19, 21).

* regarding claim 9, a method/method disclosed by apparatus/ for ejecting a liquid drop (Abstract, figs 15 & 17);

* transmitting a driving waveform driving a liquid drop ejecting head to a liquid drop ejecting head device (col 14, lines 60-67, col 15, lines 1-5, figs 1, 3, 19, 21).

* reading out a record datum indicating whether or not the liquid drop is ejected from a storage section in the liquid drop ejecting head device (col 14, lines 4-16, 60-67, col 15, lines 1-5, figs 1, 17, 19, 21).

* driving the liquid drop ejecting head device according to the driving waveform and the record datum and ejecting the liquid drop from the liquid drop ejection head (col 14, lines 60-67, col 15, lines 1-5, figs 1, 19, 21).

* regarding claim 10, writing the record datum in the storage device (col 14, lines 60-67, col 15, lines 1-5, figs 1, 3, 17, 19, 21).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Imanaka et al. (US 6,116,714) in view of Igarashi (US 2005/0078134 A1)

Imanaka et al. disclose the following claimed limitations:

- * regarding claim 5, a liquid drop ejecting device (Abstract, fig 15);
- * a liquid drop ejecting head device having a liquid drop ejecting head ejecting a liquid drop, (col 13, lines 12-30, col 14, lines 51-67, col 14, lines 1-36, figs 15 & 17);
- * a controlling device transmitting the record datum (col 14, lines 4-16, fig 17);
- * a driving waveform/pulse width/ driving the liquid drop ejecting head to the liquid drop ejecting head device (col 14, lines 60-67, col 15, lines 1-5, figs 1, 3, 19, 21)
- * regarding claim 6, wherein the liquid drop ejecting head device controls the liquid drop ejecting head according to the driving waveform/pulse width/ which is transmitted from the controlling device (col 14, lines 4-16, 60-67, col 15, lines 1-5, figs 1, 3, 17, 19, 21);
- * further regarding claim 6, the record datum which is read from the storage section by the storage controlling section (col 14, lines 4-16, 60-67, col 15, lines 1-5, figs 1, 3, 17, 19, 21).

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* regarding claim 7, wherein the controlling device transmits a part of the record datum or an entire record datum to the liquid drop ejecting head device before the liquid drop ejecting head device ejects the liquid drop such that the record datum be stored in the storage section by the storage controlling section (col 14, lines 60-67, col 15, lines 1-5, figs 1, 3, 19, 21).

Imanaka et al. does not disclose the following claimed limitations:

* regarding claim 4, wherein the liquid drop ejecting head device is provided in the liquid drop ejecting device so as to be detachable therefrom.

* further regarding claim 5, a detachable storage section storing at least one of record datum indicating whether or not the liquid drop is ejected from the liquid drop ejecting head device and a storage controlling section reading out at least one of the record datum from the detachable storage section and/or writing at least one of the record datum to the detachable storage section.

* further regarding claim 6, the record datum which is read from the detachable storage device by the storage controlling section.

Igarashi disclose the following:

* regarding claim 4, wherein the liquid drop ejecting head device is provided in the liquid drop ejecting device so as to be detachable therefrom (para 0257 & 0280, fig 2) for the purpose of attaching or detaching other storage componets/devices.

* further regarding claims 5 & 6, a detachable storage section storing at least one of record datum indicating whether or not the liquid drop is ejected from the liquid drop ejecting head device and a storage controlling section reading out at least one of the record datum from the detachable storage section and/or writing at least one of the record datum to the detachable storage section (para 0257 & 0280, fig 2) for the purpose of attaching or detaching other storage componets/devices.

It would have been obvious at the time of the invention was made to a person having ordinary skill in the art to utilize a detachable liquid drop ejecting head and a detachable storage device for the purpose of attaching or detaching other componets/devices as disclosed by Igarashi into Imanaka et al. for the purpose of attaching or detaching other storage componets/devices.

Response to Arguments

9. Applicant's arguments with respect to claims 1-10 & 13-15 have been considered but are moot in view of the new ground(s) of rejection. Please see the above rejection Imanaka et al., an dImanaka et al. in view of... Imanaka et al. disclose an ink jet printer having a storage for record datum in the printhead.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Communication With The USPTO

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to K. Feggins whose telephone number is 571-272-2254. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patel Vip can be reached on 571-272-2458. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

 7/6/07
K. FEGGINS
PRIMARY EXAMINER